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For The Federal Circuit

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U.S. PATENT & TRADEMARK OFFICE

**IN RE JACK RICHARD SIMPSON**

**APPEAL FROM THE UNITED STATES PATENT AND  
TRADEMARK OFFICE, BOARD OF PATENT APPEALS AND  
INTERFERENCES**

**REPLY BRIEF OF APPELLANT  
JACK RICHARD SIMPSON**

Larry L. Coats  
Edward H. Green, III  
COATS & BENNETT  
1400 Crescent Green  
Suite 300  
Cary, North Carolina 27511  
(919) 854-1844

*Dated: December 13, 2002*

*Counsel for Appellant*

## Table of Contents

	<u>Page</u>
Table of Authorities .....	iii
I. In Interpreting “Trim” the PTO has Ignored the Prosecution History .....	2
A. The PTO’s Interpretation of “Trim” is Plainly at Odds with the Prosecution History .....	3
B. The Broadest Reasonable Interpretation of a Claim Term Should Not Conflict with the Prosecution History.....	5
II. The PTO’s “Unwanted Material” Interpretation for “Trim” is Not. Consistent with the Specification .....	8
III. Smithwick Does Not Disclose a Trim Stripper or an Outside Trim Piece, and the U-shaped Cutting Blades in Smithwick are Not Trim Cutting Blades.....	10
IV. The Board’s Interpretation of the Claimed Term “At Least One Trim Stripper Mounted Outside the Trim Cutting Blade” is Unreasonable.....	11
V. The Smithwick Patent Does Not Disclose at Least One Trim Stripper Mounted Outside the Trim Cutting Blade .....	12
VI. Smithwick Does Not Disclose a Trim Stripper With “An Angled Outer Stripper Surface”, That is Angled Outwardly and Away From the Trim Blade .....	13
VII. Smithwick Does Not Disclose Every Element of Method Claim 28 .....	14
VIII. This Case Should Not Be Remanded Because the Board Failed to Properly Address Claim 3.....	15
IX. The Board’s Claim Interpretation is Wrong as a Matter of Law and There is No Substantial Evidence Supporting its Decision that the Claims are Anticipated.....	15

X.	Conclusion .....	17
XI.	Certificate of Filing and Service	
XII.	Certificate of Compliance	

## Table of Authorities

### Page(s)

#### Cases

<i>Autogiro Co. of America v. United States</i> , 384 F.2d 391 (Ct. Cl. 1967) .....	9
<i>In re Cortright</i> , 165 F.3d 1353 (Fed. Cir. 1999) .....	5, 11
<i>In re Dance</i> , 160 F.3d 1339 (Fed. Cir. 1998) .....	6
<i>In re Morris</i> , 127 F.3d 1048 (Fed. Cir. 1997) .....	6, 7, 8

The Brief of the United States Patent and Trademark Office (PTO) devotes little time discussing the Board's claim interpretation analysis. Rather, the majority of the Brief is directed to a strained exercise of attempting to read Mr. Simpson's claims on Smithwick. As noted earlier, the Board's opinion is simply devoid of any real claim interpretation beyond the superficial, and the PTO's Brief did not change that. Further, after considering the PTO's Brief, it is clear that in rejecting Mr. Simpson's claims as being anticipated, the Board never really considered the specifications and at least the implicit definitions therein, the prosecution history and the definitions and disclaimers therein, and finally, how a person of ordinary skill in the art would interpret the disputed claim terms in view of the specification and the official record. As a result, the Board's interpretation was rendered in a vacuum and was not rendered in the context of the specification, the prosecution history and how a person of ordinary skill in the art would interpret these disputed claim terms. To the extent that the claim terms were interpreted, the interpretation is unreasonable.

**I. In Interpreting “Trim” the PTO has Ignored the Prosecution History**

Nowhere in the PTO’s Brief is there any discussion of the prosecution history. This is especially noteworthy in this case because the prosecution history focuses on the meaning of the claim term “trim” and explicitly explains the meaning of “trim” and why Smithwick does not disclose a “trimming” operation.

As discussed in Appellant’s Brief, “trim” is a particular part of the corrugated board. Trim is the outer edge 62 that is cut from the blank CB initially fed into the die 30. What is left after the trim 62 has been cut is the product board. Appellant’s Br. p. 30. In the product board, holes or notches are typically formed. But the material cut from the product board to form the holes or notches is not trim.

The Board never explicitly addressed the meaning of “trim”. A.1-8. However, the PTO in its Brief, now for the first time, proffers that trim means “unwanted material”. PTO’s Br. at p. 9. As discussed later, there is no basis in the specification or the prosecution history for this “unwanted material” interpretation. Indeed, such an interpretation is contrary to both the specification and prosecution history. Basically, the PTO now maintains that trim, as used in Mr. Simpson’s claims, means any and all material cut by the die from the corrugated board. That construction is inconsistent with the specification and the prosecution history and is wrong.

A. The PTO's Interpretation of "Trim" is Plainly at Odds with the Prosecution History

The issue of the meaning of "trim" was the central focus of the prosecution.

A.91-92. The Examiner effectively maintained that "trim" was any and all material cut from the corrugated board, irrespective of location. Mr. Simpson, on the other hand, maintained that the appropriate meaning was much narrower, and that trim, consistent with the specification, meant the outer edge 62 cut from the blank corrugated board.

When faced with the interpretation advanced by the Examiner and with the accompanying rejection of all pending claims, Mr. Simpson, during prosecution, spelled out in a most pointed and explicit manner what the claim term "trim" means and what it did not mean.

First, the present invention is aimed totally at a trim stripper for a rotary cutting die that cuts corrugated board. It is important to appreciate that the present invention deals with cutting and removing trim edge from a blank corrugated board begin fed into the die. That is, the present invention deals with taking a blank corrugated board and trimming one or more of the outer edges so as to produce what is referred to as the product board. That is, the blank corrugated board is trimmed around outer portions so as to leave the product board. The product board is then internally cut, creased and scored to form the corrugated board product that becomes the corrugated container, for example.

The prior art cited by the patent office, the Smithwick patent, does not in any way relate to cutting or stripping trim from the incoming blank corrugated board sheet. Indeed, the Smithwick patent does not even show any trim strippers. The Smithwick patent is aimed at ejecting cut scrap from the product board itself. Note in the Smithwick patent, where the scrap ejector 10 is always confined within the inside of the trim cutting blades 112. Essentially, in operating on the corrugated product itself, in some cases, it is necessary to cut holes or slots in the product itself. The scrap ejector 10 in Smithwick et al. is what ejects the corrugated board out from the holes in the product. The Smithwick et al. scrap ejector shown in figure 3 and indicated by the numeral 10, has nothing whatsoever to do with trimming and stripping trim pieces from the blank corrugated board. Thus, in the claims, the word trim means the material cut from the outside of the blank and not material cut internally from the product itself.

A.91-92

With that explanation, there can be no doubt as to what “trim” means and why the corrugated board cut from the product portion by the Smithwick die cannot be termed “trim” as that term is used in Mr. Simpson’s claims. This portion of the prosecution history was previously discussed. Appellant’s Br. p. 31-32. However, the PTO did not mention the prosecution history and certainly did not address Mr. Simpson’s explicit definition of “trim” and the clear and unambiguous disclaimer of any interpretation of “trim” that would cover the corrugated board ejected by the ejectors 10 of Smithwick.

A close review of the above representations is instructive. First, Mr. Simpson again draws the distinction between the blank corrugated board and the

product board. That is, the “trim” is what is cut from the outer edge of blank corrugated board and what is left after the trim is cut, is the product board. Then Mr. Simpson points out that the resulting product board is internally cut, creased and scored to form a corrugated container, for example. A.91. Then, and importantly, Mr. Simpson distinguishes the claimed invention from the Smithwick patent. Particularly, Mr. Simpson points out that the scrap ejector 10 in Smithwick functions to eject corrugated board out of holes cut in the product. These scrap ejectors 10, as pointed out in the prosecution history, have nothing whatsoever to do with trimming and stripping trim pieces from the blank corrugated board. Then Mr. Simpson concludes by stating: “Thus, in the claims, the word trim means the material cut from the outside of the blank and not material cut internally from the product itself”. The distinction between “trim” as used in the claims and the corrugated board ejected from the product by Smithwick could not have been made clearer.

B. The Broadest Reasonable Interpretation of a Claim Term Should Not Conflict with the Prosecution History.

There is no doubt that the broadest reasonable interpretation proffered by the Patent Office must be consistent with the specification, and the claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Cortright*, 165 F.3d 1353, 1358 (Fed. Cir. 1999). In addition, the broadest reasonable interpretation should be consistent with the

prosecution history. *In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997). Indeed, the Commissioner has recognized that the broadest reasonable interpretation must be consistent with both the specification and prosecution history. *In re Dance*, 160 F.3d 1339, 1344 (Fed. Cir. 1998) (noting that “[t]he Commissioner replies that the patent examiner is obligated to give Dance’s claims their broadest reasonable interpretation in view of the specification and prosecution history...”).

In *Morris*, the Court, in analyzing how broad the broadest reasonable interpretation of a claim could be, examined the prosecution history. In the end, the Court determined that the “prosecution history is equally unhelpful in divining the interpretation sought by appellants.” *Morris*, 127 F.3d at 1056. However, what is instructive here is that the Court did, in fact, consult and review the prosecution history to determine if it limited the PTO’s broadest reasonable interpretation for the claim term “integrally formed”. After carefully reviewing the prosecution history, the Court concluded:

In all cases the appellants first describe their invention followed by a general description of the prior art reference. They then conclude with a conclusory statement such as “[I]t is clear that Applicants’ inventive concept, as recited in claim 1 (amended), is not anticipated by the prior art,” or, even more vaguely, “it is clear that the base plate and housing arrangement disclosed in Brown ‘888 is completely different in structure than the acoustic isolator apparatus recited in Applicants’ claims.” Never do the appellants particularly distinguish their *claimed* invention (as compared with their “inventive concept,” whatever that means) from the prior art. We interpret this as a veiled attempt to avoid the potential future effects of

prosecution history estoppel. Such evasiveness we cannot condone, particularly when the public must rely on the written record to define the resulting property right. *See Warner-Jenkinson*, \_\_\_ U.S. at \_\_\_, 117 S. Ct. at 1040.

*Id.*

Mr. Simpson's prosecution history is much different. There are no vague and conclusionary statements about what "trim" means. Nor is there any question left as to how Mr. Simpson's claimed invention is distinguishable from Smithwick. Moreover, Mr. Simpson and his attorney cannot be accused of engaging in "a veiled attempt to avoid the potential future effects of prosecution history estoppel". Indeed, the above statements taken from the Simpson prosecution history without doubt give rise to classic prosecution history estoppel. In explaining to the PTO what "trim" means and what it does not mean, Mr. Simpson has disclaimed, disavowed and surrendered any interpretation of "trim" that would cover the corrugated board ejected by the Smithwick ejectors. With this record, the public will have no difficulty in determining what "trim" means.

The Patent Office has unduly expanded the meaning of "trim" to include all so-called "unwanted material". Again, the broadest reasonable interpretation must be consistent with the one that those skilled in the art would reach. Certainly, one skilled in the art, after reviewing this prosecution history, would not reach the conclusion reached by the Board in this case. The PTO's interpretation is clearly contrary to the prosecution history.

## **II. The PTO's "Unwanted Material" Interpretation for "Trim" is Not Consistent with the Specification**

There is another limit to the broadest reasonable interpretation principle. That is, the broadest reasonable interpretation must be consistent with the specification. *Morris*, 127 F.3d at 1055. In this case, neither the Board nor the PTO's brief devotes any significant attention to Mr. Simpson's specification, except to argue that the specification does not give a special definition for "trim". PTO Br. p. 16. However, at least implicitly, a close study of the specification and drawings reveals that the Board's interpretation of "trim" is indeed inconsistent and at odds with Mr. Simpson's specification.

From reading Mr. Simpson's specification and from reviewing his drawings there can be no doubt that Mr. Simpson's claimed invention is directed solely at cutting an outer edge from the initial corrugated board, referred to as the blank CB, fed into the die 30, and separating the cut outer edge from the remainder of the blank CB. A.30-31, 53-55, 57-58, 60-61. The specification repeatedly distinguishes between the blank CB and what is left of the blank CB after the outer edge has been trimmed. After the blank CB has been trimmed, the remainder is referred to as trimmed blank material or product. A.31. Mr. Simpson's claimed invention is aimed solely at trimming the outer edge of blank CB. Mr. Simpson's invention has nothing whatsoever to do with operating on the remaining trimmed

blank or product. The entire thrust of the specification deals only with trimming the outer edge of the blank CB.

Smithwick, on the other hand, focuses on operating on the product portion of the corrugated board after the outer edge has been trimmed from the blank CB. Smithwick says nothing whatsoever about dealing with cutting the outer edge of the corrugated board fed into the die. To the contrary, the Smithwick disclosure provides internal U-shaped cutting blades and ejectors 10 disposed within the U-shaped cutting blades that operate only on the product portion as defined by the Simpson specification.

The PTO's interpretation of "trim" is also inconsistent with the drawings. Drawings may be used like the written specification to provide evidence relevant to claim interpretation. See *Autogiro Co. of America v. United States*, 384 F.2d 391, 398 (Ct. Cl. 1967). The drawings particularly depict the trim stripped by a number of different trim stripper embodiments. In each case, the trim that is cut and controlled is referred to by the numeral 62. See Figures 4A-4F, 7-9 and 11-14. A.53-55, 57-58, 60-61. At least implicitly, these drawings show that the "trim" is in fact an outer edge portion of the blank CB fed into the cutting die 30. Based on Mr. Simpson's drawings, the Board's interpretation of "trim" is unreasonable, and indeed, unsupported.

A person of ordinary skill in the art viewing Mr. Simpson's drawings would understand and appreciate that "trim", as used in Mr. Simpson's claims and as described in the specification and drawings, means an outer edge cut from the corrugated board fed into the die. A person of ordinary skill in the art would not construe or interpret "trim" to mean that material that is cut in the process of making holes or slots in the corrugated board that is left after the outer edge or "trim" is cut therefrom. The interpretation proffered by the Board is unreasonable, and inconsistent with the way a person of ordinary skill in the art would construe the "trim" term.

**III. Smithwick Does Not Disclose a Trim Stripper or an Outside Trim Piece, and the U-shaped Cutting Blades in Smithwick are Not Trim Cutting Blades**

The Board's finding that Smithwick includes a trim stripper which engages an outside trim piece is based on a flawed interpretation. If the claim term "trim" is given its proper construction consistent with the specification, prosecution history and how a person of ordinary skill in the art would construe the term, then Smithwick does not include these elements.

Further, as discussed in Appellant's Brief, Smithwick does include a trim cutting blade. The trim cutting blade in Smithwick is the generally rectangular blade that extends around the three U-shaped cutting blades in the Smithwick patent. A.78. The U-shaped cutting blades are not trim blades. The Board

improperly construed trim and then improperly interpreted the Smithwick patent to hold that the U-shaped cutting blades were trim blades, when in fact, the Smithwick patent included trim blades that were ignored in making the rejection.

**IV. The Board's Interpretation of the Claimed Term "At Least One Trim Stripper Mounted Outside the Trim Cutting Blade" is Unreasonable**

The PTO maintains that the Board construed "outside" to mean that the trim stripper is positioned on the side of the cutting blade that falls outside of the final product area. PTO's Br. p. 20. There are a number of problems with this construction. First, the construction simply refers to the "cutting blade". However, the claims themselves are more specific. They call for the trim stripper to be mounted outside the trim cutting blade. There is a difference between a cutting blade and a trim cutting blade. Next, the Board and the PTO advocate that "outside" means that the trim stripper "falls outside the final product area" (emphasis added). The PTO fails to indicate how it arrived at the construction of "the final product area". Apparently, this construction is advanced in light of the Smithwick disclosure. The Simpson claims and the specification refer to a product portion, but not to a final product portion or final product area.

A more reasonable interpretation is arrived at by reading the claims in light of the specification and in a manner consistent with how a person of ordinary skill in the art would interpret the claim terms. See *Cortwright*, 165 F.3d at 1357. The claims provide that at least one trim stripper is mounted outside of the trim cutting

blade. Thus, the reference is to the trim cutting blade. A review of the specification shows that there is an inside and an outside with respect to the trim cutting blade. The Board took the unusual position of maintaining that either side of the trim cutting blade could be the outside. Clearly that is wrong. In any event, reviewing Mr. Simpson's claims, written specification and drawings reveal that when the trim blade cuts the corrugated board that "outside the trim blade" defines the cut trim while inside the trim blade defines the product portion. Thus when the claim states that the trim stripper is mounted outside of the trim blade, that simply means that the trim stripper is mounted on the side of the trim blade where it can engage the cut outer edge of the corrugated board that is referred to as the trim. That is the proper construction.

**V. The Smithwick Patent Does Not Disclose At Least One Trim Stripper Mounted Outside the Trim Cutting Blade**

For the reasons already articulated, Smithwick cannot anticipate this element of the claimed invention. The U-shaped cutting blades in Smithwick do not cut trim. That is, they do not trim the outer edge of the blank corrugated board fed into the die. The U-shaped cutting blades referred to by the Board operate on the corrugated board that remains after the trim has been cut. Particularly these U-shaped cutting blades cut holes or notches in the product board. The material from which the holes or notches are formed does not constitute trim and particularly is not considered to be trim by those people skilled in the art.

Notwithstanding the above, the PTO's argument here fails for other reasons. First, the trim strippers are positioned with respect to the trim cutting blade. In Smithwick, as noted above, the U-shaped blades are not trim cutting blades. The Board and the PTO's Brief fail to acknowledge that the real trim cutting blades in the Smithwick patent is the generally rectangular outer blade that extends around the three U-shaped blades and which is also referred to by the numeral 112. A.78. Clearly, the scrap ejectors 10 are not disposed outside of the real trim cutting blades in Smithwick.

**VI. Smithwick Does Not Disclose a Trim Stripper With "An Angled Outer Stripper Surface", That is "Angled Outwardly and Away From the Trim Blade"**

The PTO argues that Smithwick anticipates these elements of Mr. Simpson's claims by focusing on the end portions of the U-shaped cutting blades and the adjacent ejectors in the Smithwick patent. The PTO's Brief is willing to ignore that for all practical purposes, the sidewalls 20 and 22 of the Smithwick ejector 10 extend transversely with respect to the cutting blade. There is no discussion whatsoever in the written specification of Smithwick that would suggest that the ejectors 10 are positioned with respect to the U-shaped cutting blades such that an angle outer stripper surface is angled outwardly and away from the trim blade. Apparently, the PTO's position here is that the drawings of Smithwick support its interpretation. However, the only drawing that shows the ejectors 10 and U-

shaped cutting blades 112 together is Figure 2. A.78. However, this drawing does not support the PTO's interpretation. There is nothing in Figure 2 that shows the ejector 10 including an angled outer stripper surface that is angled outwardly and away from the trim blade. Indeed, a fair interpretation of Figure 2 of Smithwick shows just the contrary. The sides of the ejector 10 are mainly extending transversely with respect to the cutting blade.

## **VII. Smithwick Does Not Disclose Every Element of Method Claim 28**

Contrary to the arguments proffered by the PTO, method claim 28 is not anticipated by Smithwick. For the same reasons advanced above, the Smithwick patent simply does not disclose the method steps set forth in claim 28. Mr. Simpson will not rearticulate those arguments in detail but simply note for the Court that Smithwick does not even discuss engaging an outside trim edge portion of the sheet of corrugated board with a trim stripper. As discussed earlier, Smithwick does indeed disclose a trim cutting blade, but the real trim cutting blade in Smithwick is not the U-shaped blades that the Board and the PTO term "trim cutting blades". In short, Smithwick does not show trim strippers mounted outside its real trim cutting blade and therefore, there cannot be any anticipation here. Indeed, although the Smithwick patent does disclose a trim cutting blade, Smithwick has no discussion or disclosure that relates in any way to handling the outside trim that is cut by his trim cutting blade.

The Board's anticipation position is predicated on an improper interpretation of several elements and limitations in Mr. Simpson's claims. The resulting interpretations are unreasonable and wrong as a matter of law and consequently the finding of anticipation is not supported by substantial evidence.

**VIII. This Case Should Not Be Remanded Because the Board Failed to Properly Address Claim 3**

The PTO acknowledges that the Board ignored claim 3. That is noteworthy for reasons unrelated to claim 3. The Board's entire claim interpretation analysis and anticipation findings are not only wrong, but they are brief and less than thorough. The fact that the Board ignored claim 3 only underscores this.

Notwithstanding, for the same reasons articulated above, claim 3, if properly construed, is not anticipated as a matter of law. The Court should hold that since claim 1 is not anticipated that it follows that claim 3 cannot be anticipated. There is no reason for remand.

**IX. The Board's Claim Interpretation is Wrong as a Matter of Law and There is No Substantial Evidence Supporting its Decision that the Claims are Anticipated**

There is no disagreement that claim construction is a matter of law. If the claims are improperly construed then there can be no substantial evidence to support the Board's findings. In this case, the claims were improperly construed, even in view of the principle that the Board may give the claim terms their broadest reasonable interpretation in light of the specification, prosecution history

and in light of how a person of ordinary skill in the art would construe the claims. In this case, even if only one of the Board's interpretations is wrong, then there is no substantial evidence to support the Board's finding. In order for the Board's finding to be supported by substantial evidence, each of its claim interpretations must be correct.

Even if all of the interpretations could somehow be justified, there is still a question as to whether the Board properly applied the Smithwick patent. For example, the Board construed the U-shaped cutting blades as being trim blades when in fact the trim blade of the Smithwick patent is the rectangular outer blade that extends around the three U-shaped cutting blades. In addition, and in the way of further example, the Board construed the ejectors 10 of Smithwick as having "an angle outer stripper surface" that is "angled outwardly and away from the trim blade". There is no substantial evidence that supports these findings.

## **X. Conclusion**

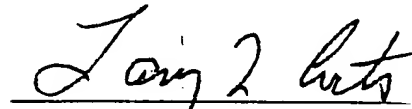
For the foregoing reasons, the decision of the Board should be reversed and claims 1, 3, 5, 8, 9, 28 and 29 found not to be anticipated by Smithwick.

Respectfully submitted,

COATS & BENNETT, PLLC

Dated: December 13, 2002

By:



Larry L. Coats

Edward H. Green, III

1400 Crescent Green, Suite 300

Cary, North Carolina 27511

(919) 854-1844

Attorney for Jack Richard Simpson

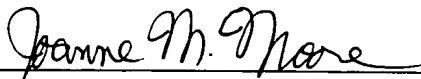
**XI. Certificate of Filing and Service**

I hereby certify that on this 13<sup>th</sup> day of December, 2002, two bound copies of the foregoing Reply Brief of Appellant was served via first-class mail, postage prepaid, addressed to the following:

William G. Jenks  
Office of the Solicitor  
P.O. Box 15667  
Arlington, Virginia 22215

I also certify that on this 13<sup>th</sup> day of December, 2002, twelve (12) bound copies of the Reply Brief of Appellant were hand filed at the Office of the Clerk, United States Court of Appeals for the Federal Circuit.

The necessary filing and service to Counsel were performed in accordance with the instructions given me by counsel in this case.

  
\_\_\_\_\_  
Joanne M. Moore  
The Lex Group<sup>DC</sup>  
One Massachusetts Ave., NW  
Suite 670  
Washington, DC 20001  
(202) 789-2400

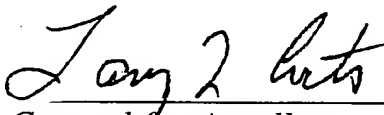
## **XII. Certificate of Compliance**

Pursuant to Federal Rule of Appellate Procedure 32(a)(7)(C), the undersigned certifies that this brief complies with the type-volume limitations of Federal Rule of Appellate Procedure 32(a)(7)(B)(i).

1. Exclusive of the exempted portions of the brief, as provided in Fed. R. App. Proc. 32(a)(7)(B)(iii), this brief includes 3,938 words.

2. This brief has been prepared in proportionally spaced typeface Microsoft Word 97 in 14 point Times New Roman font. As permitted by Fed. R. App. Proc. 32(a)(7)(C), the undersigned has relied upon the word count of this word-processing system in preparing this certificate.

Dated: December 13, 2002

  
Counsel for Appellant